



PART IV.—EDUCATION, SCIENCE, AND ART (C).

Administration Report of the  
Director of Medical and Sanitary  
Services for 1941.

(Dr. S. F. CHELLAPPAH.)

JULY, 1942.

*Printed on the Orders of Government.*

PRINTED AT THE CEYLON GOVERNMENT PRESS, COLOMBO.

To be purchased at the GOVERNMENT RECORD OFFICE, COLOMBO; price 15 cents.

1942.

*"Copy" received : June 26, 1942.*

*Proof sent : July 1, 1942.*

*Proof returned : July 6, 1942.*

*Published : July 8, 1942.*



# DEPARTMENT OF MEDICAL AND SANITARY SERVICES.

## REPORT OF THE DIRECTOR OF MEDICAL AND SANITARY SERVICES FOR THE YEAR 1941.

### SECTION 1.—GENERAL DISEASES.

The most prevalent disease during the year under review as in previous years was malaria. 61,853 cases were treated as in-patients in hospitals and 2,860,899 cases at the outdoor dispensaries. Other diseases which prevailed during the year included pneumonia, bronchitis, intestinal affections, rheumatism, ankylostomiasis and influenza.

A summary of the most prevalent diseases is shown in the table of morbidity (section 14).

### SECTION 2.—COMMUNICABLE DISEASES.

1. The following table gives the notified cases of communicable diseases with the deaths resulting from them:—

Disease.	Cases.	Deaths.	Disease.	Cases.	Deaths.
Chickenpox ..	4,342	2	Mumps ..	547	—
Cholera ..	5	4	Pulmonary T. B. ..	2,074	387
Diphtheria ..	125	39	Plague ..	—	—
Dysentery ..	5,052	605	Smallpox ..	167	25
Enteric ..	2,939	465	Whooping Cough ..	422	8
Measles ..	6,769	6			

There were 2 independent outbreaks of smallpox one at Jaffna and Mulliyawalai, and the other at Colombo, Horana, Dehiwala, Padukka, Panadure, Trincomalee, Kalutara, Veyangoda, Jaela, Jaffna and Ratnapura areas.

The source of infection in both outbreaks was traced to recent arrivals from India.

The cases of Cholera occurred at Trincomalee, Gangurewa, Tissamaharama and Nekutwewa. The source of infection in all these cases was not traceable.

#### Immunization : Anti-typhoid.

1st dose ..	71,936
2nd dose ..	55,559

#### Anti-smallpox.

Primary ..	177,411
Secondary ..	114,065

91.01 per cent. of the previous year's births have been vaccinated against smallpox.

In addition 568,784 vaccinations were done in connection with the mass vaccination campaign launched in the smallpox infected areas.

Sixty Sanitary Assistants secured their certificates of competency in vaccination making a total of 329 up-to-date.

### 2.— Other Communicable Diseases of Importance.

(a) *Malaria*.—Special mosquito surveys were undertaken for various local authorities.

The field laboratory mentioned in last year's report could not be established owing to difficulty in securing the necessary equipment.

(b) *Hookworm*.—1,398,985 treatments were given. 38 Sanitary Assistants, one Public Health Nurse and nine Estate Dispensers were granted certificates of competency in Hookworm treatment.

(c) *Yaws (Parangi)*.—There were 2,063 known infective and 4,251 non-infective cases which received 7,080 injections. At the end of the year there were 687 infective and 4,972 known non-infective cases; 64 were dead and 591 untraceable.

(d) *Filariasis*.—There were 2,082 known cases of Filariasis in 331 villages. Pistia plants were removed from 119 out of the 423 localities in which they (pistia plant) were growing.

Investigative work at Bandaracoswatte (N. W. P.) was continued and extended to other localities including Colombo and Welisara.

### SECTION 3.—VITAL STATISTICS.

The Registrar-General has furnished the following figures\* for the year 1941:—

(a) Estimated population for mid-year, 1941 .. .. 6,920,000

	No.	Rate.	
Births ..	219,874	36.5	per 1,000 population
Deaths ..	113,003	18.8	do.
Infant deaths ..	28,461	129	per 1,000 births
Maternal deaths ..	3,369	15.3	do.

\* Subject to revision.



Table of the Main Causes of Deaths Registered in Ceylon for 1941.

All Causes.—113,003.

I.	<i>Infectious and Parasitic diseases</i>	22,413
	Typhoid fever and Paratyphoid fever	1,122
	Diphtheria	73
	Influenza	1,807
	Dysentery	2,546
	Tuberculosis of the Respiratory system	3,143
	Tuberculosis of other organs	314
	Disseminated Tuberculosis	(acute 18 unspecified 3)
	Malaria fever and Malarial Cachexia	7,113
	Black water fever	19
	Ankylostomiasis	1,456
II.	<i>Cancer and other Tumours</i>	785
	Cancer and other malignant tumours	726
III.	<i>Rheumatic Diseases, Nutritional Diseases, Diseases of the Endocrine Glands and other general diseases</i>	6,355
	Acute rheumatic fever	2,139
	Rickets	3,436
IV.	<i>Diseases of the Blood and Blood-making organs</i>	2,213
V.	<i>Chronic Poisonings and Intoxications</i>	2
VI.	<i>Diseases of the Nervous System and of the organs of Special Sense</i>	13,670
	Infantile convulsions (age under 5 years)	19,163
VII.	<i>Diseases of the Circulatory System</i>	2,533
VIII.	<i>Diseases of the Respiratory system</i>	11,849
	Bronchitis	1,370
	Broncho-pneumonia (including Capillary Bronchitis)	1,876
	Lobar pneumonia	2,163
	Pneumonia, unspecified	3,256
IX.	<i>Diseases of the Digestive System</i>	8,283
	Diarrhoea and enteritis (under 2 years of age)	1,500
	Diarrhoea and enteritis (2 years and over)	5,103
X.	<i>Non-venereal Diseases of the Genito-Urinary System and Annexa</i>	1,739
XI.	<i>Diseases of Pregnancy, Child Birth and the Puerperal State</i>	3,369
	Puerperal haemorrhage	283
	Puerperal Sepsis, not returned as post-abortive	1,694
	Puerperal Albuminuria and Convulsions	1,356
XII.	<i>Diseases of the Skin and Cellular Tissue</i>	7,483
XIII.	<i>Diseases of the Bones and Organs of Locomotion</i>	35
XIV.	<i>Congenital Malformations</i>	90
XV.	<i>Diseases of Early Infancy</i>	9,114
	Congenital Debility	5,571
	Premature Birth	3,189
XVI.	<i>Old age</i>	6,525
XVII.	<i>Violent and Accidental Deaths</i>	3,208
XVIII.	<i>Ill-defined causes of Deaths</i>	13,327
	Cause of death unstated or ill-defined—	
	(a) Dropsy	1,769
	(b) Pyrexia	10,181

## SECTION 4.—HYGIENE AND SANITATION.

*Water Supply.*—39 towns are provided with pipe borne supplies. 1,075 new wells were built and of these 1,011 were private and 64 public.

530 samples of water were examined bacteriologically and 144 showed evidence of recent pollution.

166 samples of water were chemically analysed and 57 of them showed evidence of pollution.

*Disposal of Excreta.*—A total of 23,474 new latrines were built. The drop in the figures by 3,598 compared with last year is due to the high cost of materials. 1,226 old latrines were converted to Sanitary type.

Experiments are being carried out with water-seal latrines in areas where the sub-soil water is high.

*Drainage.*—88,278 feet of cement drains were newly built in Urban Council and sanitary board towns and bazaar areas. In 20 towns drainage schemes have been worked out.

*Licensed and Offensive Trades.*—Out of the 11,048 licensed premises, 11,041 were inspected and 4,957 radically improved. There were 2,185 offensive trades and 1,065 nuisances were abated.

*Anti-fly Measures.*—Fly nuisance still continues to be a special problem in some towns. 51,955 out of the 69,708 breeding places of flies detected were dealt with.

*Food Sanitation.*—94,553 head of cattle were inspected and 88,859 passed for slaughter. Of the 41,367 goats inspected 40,027 were passed as fit for slaughter.

1,020 samples of milk were examined, 397 of which were found to be adulterated.

*Estate Sanitation.*—There were approximately 2,300 estates scheduled under the Medical Wards Ordinance. The staff for health work on Estates consisted of 19 Medical Officers of Health, 38 Field Medical Officers, 5 District Medical Officers and 1 whole time Medical Officer whose services were available to estates on all health matters.



There were 84 hospitals and 192 dispensaries maintained by Government in Estate Medical Districts. In addition there were 98 Estate hospitals and 602 Estate Dispensaries. All Estate Hospitals were inspected during the year for rebate purposes. The 602 Estate Dispensaries served 1,059 estates. 294 of the dispensaries were inspected during the year. The estate medical attendants consisted of 4 qualified medical officers, 4 Indian qualified but not registrable in Ceylon, 2 qualified apothecaries, and 644 approved dispensers.

397 estates were inspected. Sanitary condition of 50 per cent. of these estates were either very good or good, 40 per cent. fair and 10 per cent. either poor or bad. 148 of these estates were fully provided with sanitary dust bins and 199 partly. 731 of these estates had non-overcrowded lines, 86 slightly over crowded and the balance 53 had overcrowded lines. Of the 128,975 line-rooms inspected 96,147 were up to Government standard. In the estates inspected there were 24,668 pit, 947 water lorne and 12,853 bucket latrine compartments. 2,031 latrine compartments were further required. 375 of the estates inspected had sufficient number of latrines, 205 insufficient and 17 had no latrines. 66 estates had sanitary conveniences for children provided fully and 74 estates partly. 550 estates had entirely protected water supplies, 224 partly protected and 103 unprotected supplies. 325,691 labourers in 1,150 estates were treated for Ankylostomiasis in addition to 3,694 of the 3,584 arrivals at the Mandapam Camp.

On all estates there were 275 registered midwives serving 417 estates and 49 unregistered midwives serving 64 estates. In addition 133 estates were served by outside registered midwives. 699 estates had creches and 615 estates were supplying cooked meals to children. 187 estates had maternity wards and 31 estates had lying-in rooms attached to estate lines. 10 estates had clinics provided and 57 other estates were served by outside clinics. 19,306 persons in 764 estates were vaccinated against smallpox. 15,076 of these were successful, 705 unsuccessful and 3,525 cases were unknown. 127 estates were visited for anti-typhoid inoculations. 7,856 first doses and 6,648 second doses were given. 248 visits by inspecting officers and 2,305 visits by the Sanitary Assistants were paid to estates in connection with communicable diseases.

Thirty-three estate schools were medically inspected. Of the 1,584 children examined 522 were defective. Of the 869 defects found 311 were corrected.

#### SECTION 5.—MATERNITY AND CHILD WELFARE.

There was a popular demand for the expansion of this service. In spite of the restriction placed on social services by war economy, yet this service received special attention. The work was carried out as outlined in previous reports.

The domiciliary midwifery service was extended by the appointment of fifty additional rural midwives. 24 new health centres were opened and the number of maternity homes was increased by 5. The number of mothers delivered in outstation hospitals and Colombo Lying-in Home was 22,639 and in the maternity homes 2,582. The number of deliveries conducted by the public health midwives in the homes was 43,515.

The number of expectant mothers, infants, and pre-school children under care were 104,359, 116,748 and 108,547, respectively.

The number of visits paid to the clinics by expectant mothers was 151,942 by infants 258,721 and by pre-school children 87,933.

#### SECTION 6.—SCHOOL HEALTH WORK.

1,435 schools were medically inspected and the number of scholars examined was 71,552 of whom 57,239 were found defective with 129,453 defects. The number of defects corrected was 63,322. Health education procedures were carried out completely in 629 and partially in 2,745 schools.

#### SECTION 7.—TUBERCULOSIS.

Chest clinics have been opened at Jaffna, Badulla, and Kurunegala and these now function as central clinics.

Two new wards have been constructed at Jaffna and an old ward has been set apart for T. B. cases at Kahawatte. These have been equipped and occupied. The Preventorium at Kandana was converted into a female ward of 28 beds.

Encouraging replies have been received from certain Urban Councils to the enquiry what preventive work they proposed to undertake in regard to the control of Tuberculosis.

#### Number of Cases treated.

Institutions.	No. Treated.
Ragama Chest Hospital .. .. .	1,327
Kandana Sanatorium .. .. .	127
Kankasanturai Sanatorium .. .. .	132
Central Chest Clinic, Colombo—	
First visits .. .. .	4,019
Total visits .. .. .	11,507

#### SECTION 8.—LEPROSY.

The leprosy survey of the whole Island having been completed, the control activities were directed chiefly to the following up of cases and contacts more efficiently, supervision of the proper working of the organised system, and special investigations. The survey revealed that 70 per cent. of cases detected were in the Western and Southern Provinces and hence more intensive anti-leprosy measures were decided upon for these provinces.



245 fresh cases were detected: of these 30 were under 14 years and the rest over 14.

22,916 school children were examined in 142 schools and 10 fresh cases were detected.

1,477 contacts in 6,185 homes were seen and examined.

Two new clinics were opened at Panadura, and Kays bringing up the total number of clinics to 24. The central clinic at Maraduna continued to be the centre for diagnosis and treatment of early cases, propaganda and training of officers.

1,213 cases were scheduled for these clinics of which 837 were for observation only, and 376 for observation and treatment. 720 cases attended the clinics and the total number of treatment given was 6,639.

By a legislative enactment the name "Lepet Asylum" was changed to "Leprosy Hospital". There were 1,998 cases segregated in both the Leprosy Hospitals at the end of the year.

### SECTION 9.—VENEREAL DISEASES.

The following hospitals and dispensaries have had improvements effected for the establishment of V. D. Clinics:—Colima, Badulla, Batticaloa, Galle, Kandy, Matale, Trincomalee, Warakapola, Polgahawela, Karabandara, Matara, Weligama, Horana, Bandarawela, and Kurunegala.

Clinics have been established in most of the important centres with or without special accommodation.

*Attendance at the Central Clinic, Colombo.*—There were 4,951 first visits and 26,254 subsequent visits and 392 minor operations were performed.

*Training of Officers.*—Ten Medical Officers were trained, 4 for a period of 3 months, 2 for 1 month and 4 for 2 weeks.

*Appointments.*—An additional house officer and sanitary assistant were appointed to the Venereal Diseases Clinic at Colombo the latter to do follow up work. A whole time medical officer was appointed to the female clinic at Colombo.

### SECTION 10.—NUTRITION.

The Nutrition Division of the Bacteriological Institute carried out dietary surveys in 13 villages; the results of the surveys were published in the Ceylon Journal of Science. Nutritional surveys for defects among school children were carried out in 29 schools. The efficiency of Red Palm oil as a substitute for cod liver oil was assessed by experiment on children and a paper on this has been submitted to the British Medical Journal. Post-mortems have been carried out on neonatal deaths and still births. Valuable information is being collected. Suitable preparations of Shark Liver oil prepared from local sharks were shown to be satisfactory to replace cod liver oil. Nutrition lectures have been given to Sanitary Assistants and Learners, Probationary Revenue Officers, Medical Students and others.

### SECTION 11.—HEALTH EDUCATION.

Health education was carried out as in previous years.

### SECTION 12.—MEDICO-LEGAL WORK IN COLOMBO.

The Judicial Medical Officer and the Assistant Judicial Medical Officer, Colombo, examined 4,536 patients and held 479 post-mortem examinations. 56 productions were microscopically examined and of these 42 were hair and 14 were blood stained articles.

### SECTION 13.—WORK DONE IN HOSPITALS AND DISPENSARIES, &c.

(a) *Hospitals.*—Four New Cottage hospitals were opened. The branch hospital at Kereella was amalgamated with the Lady Havelock Hospital.

At the end of the year there were 129 Government hospitals with a total of 11,425 beds. The total number of in-patients treated was 405,056 and the number of deaths was 20,837.

(b) *Dispensaries.*—Seven central dispensaries, 1 branch dispensary and 15 visiting stations were opened. At the end of the year there were 268 central dispensaries, 176 branch dispensaries, and 368 visiting stations. The total number of patients treated in these dispensaries, as well as in the out-patient departments of the hospitals was 7,103,299.

(c) *Special Hospitals.*—(i.) Mental Hospital. This institution has accommodation now for 2,512 patients including 12 paying patients accommodated in 6 separate villas housing 2 patients each. The daily average for the year was 3,601.

The number of certified patients admitted during the year was 1,042 and the number admitted to the House of Observation was 1,551.

The total number of patients discharged was 900. This number includes cases recovered, relieved of symptoms, partially recovered or discharged at the request of the guardians on security. 534 deaths occurred in this institution out of which 157 deaths were House of Observation cases. The diseases which caused most deaths were dysentery and phthisis.

(ii.) *Eastern Institute.* The total number of in-patients treated during the year was 1,217 and that of out-patients 2,065 thus making a total of 3,282. Of these 2,654 were actually bitten. The others were considered to be at slight risk such as the possibility of infected cuts or scratches.

*Results of Treatment.*—There were 9 deaths from hydrophobia. Of these one person failed to take the full course of treatment and also commenced treatment 11 days after date of bite and a second patient commenced treatment 36 days after date of infection and developed hydrophobia while under treatment. The failure for the year was 0.24 per cent.



## SECTION 14.—TABLE OF MORBIDITY IN RESPECT OF IN-PATIENTS AND OF OUT-PATIENTS.

## (a) Table of Morbidity in respect of In-patients.

Name of Disease.	No. of Cases.
Malaria	61,353
Malaria Cachexia	6,705
Influenza	8,865
Dysentery	7,353
Tuberculosis	6,062
Syphilis	2,093
Gonorrhoea	3,953
Chronic Rheumatism	4,235
Affections of the organ of vision	7,722
Affections of the Ear or Mastoid Sinus	1,037
Bronchitis	7,796
Pneumonia and Broncho Pneumonia	12,920
Asthma	3,618
Ankylostomiasis	14,095
Ascariasis	3,075
Abscess	12,332
Diseases of the Joints	1,917
Diarrhoea and Enteritis	12,332

## (b) Table of Morbidity in respect of Out-patients.

Name of Disease.	No. of Cases.
Malaria	2,860,399
Malaria Cachexia	290,903
Influenza	387,567
Dysentery	58,167
Syphilis	3,744
Gonorrhoea	22,403
Chronic Rheumatism	322,200
Eye Diseases	92,278
Ear Diseases	68,973
Diseases of the lungs and Pleura	381,716
Gastric Diseases	705,782
Ankylostomiasis	387,282
Intestinal troubles	560,005
Skin diseases	326,105
Ulcers	499,923

## SECTION 15.—LABORATORY WORK.

(a) *Bacteriological Institute*.—Examinations made in the Bacteriological Institute include the following:—Agglutination 6,461, B. Diphtheriae 2,491, B. Dysenteriae 2,054, Blood culture 193, Clot culture 4,727, Gonococci 30,402, B. Leprae 47, Blood for malaria 3,009, Dark ground examinations for spirochaetes 300, Sputum for T. B. 1,719, Other specimens for T. B. 589, V. Cholerae 428, W. R. 42,003, Kahn 40,626, C. F. T. 19,586, Henry's Test 2,177, No. of specimens examined for hookworm, tapeworm, roundworm by Stoll's method 8,271, by Willis' method 15,721, water samples 530, others 4,886. Total 186,223.

Call lymph and other vaccines were prepared and issued at this Institution.

165,718 specimens were examined at outstation laboratories of the Institute.

(b) *Other Laboratories*.—156,930 examinations were done by medical officers of health and field medical officers locally. They had 39,091 examinations done in Colombo.

## SECTION 16.—MEDICAL BUILDINGS.

The New Three Storey Block at the General Hospital and the new Pathology Block at the Medical College were completed. Improvements were also carried out to the kitchen at the Victoria Memorial Eye Hospital, and the Labourers' lines at the Bacteriological Institute.

The New Two Storey Ward Block at Kandy, referred to in my last report was completed. At Kurunegala, the kitchen block, maternity ward of 40 beds and certain improvements to existing buildings were completed. Certain substantial improvements were also carried out to other hospitals.

Of the new institutions that were under construction the following were completed and occupied:—New hospital, Hambantota and the Cottage hospitals at Madinola (C. P.), Pungudutivu (N. P.), Dompe (W. P.), Ittapana (W. P.), Madugoda (C. P.), and Miniduna (S. P.). The Cottage hospital at Pallowela was completed but it could not have been occupied as it is not yet provided with a water supply, which is presenting difficulties.

Thirty-six new works were sanctioned in the Estimates for 1941-42.

Public munificence has manifested itself very generously in a number of donations of buildings for various purposes.

The entire medical buildings at Ratnapura were electrified as a new lighting scheme was started in the town.



## SECTION 17.—TRAINING OF LOCAL MEDICAL AND HEALTH PERSONNEL.

### (a) Medical Personnel.

Thirteen Medical Officers were trained in the treatment of tuberculosis at the Anti-tuberculosis Institute. Ten Medical Officers were trained in the treatment of Venereal Diseases at the Venereal Diseases Clinic, General Hospital, Colombo.

Eighteen nurses and five nursing sisters completed their training during the year. One hundred male and one hundred female attendants were also trained for work in the various hospitals.

### (b) Health Personnel.

Kalutara, Panadura, Kurunegala, and Colombo Laboratories, and the Lying-in Home, Colombo, continued to be the training centres. At these centres 6 Medical Officers, 32 Sanitary Assistants and 120 midwives were trained. Divisional Revenue Officers were trained in fundamentals of rural health, anti-malaria and nutrition.

## SECTION 18.—FINANCE.

The revenue and expenditure for the financial year ended September 30, 1941, were Rs. 2,703, 239.51 and \*Rs. 13,430,141.47 respectively.

The financial statement of the expenditure of the administration of the Medical Wants Ordinance (Cap. 176) showed a surplus of Rs. 1,401,998.16 for the year ended September 30, 1940.

\* Those figures do not include the cost of new buildings and improvements to and maintenance of existing ones.

## SECTION 19.—QUARANTINE DEPARTMENT.

1. Quarantinable Diseases (see page C3 under section 2.)
2. *Ceylon Quarantine Camps in South India :—*

### (a) Mandapam Camp.

3,584 estate labourers proceeded to Ceylon, 55,188 miscellaneous passengers were passed to Ceylon; of these 53,613 were passed without detention and 1,555 after full quarantine.

35,320 persons and 3,375 estate labourers were vaccinated against smallpox.

The total resident population was 1,306.

131 cases were treated at the Camp Hospital of which 2 proved fatal.

4,574 cases were treated at the Outdoor Dispensary.

There were 2 cases of chickenpox and 1 of measles all of which recovered.

3,535 labourers were examined and 3,095 were treated for Ankylostomiasis.

82 persons were examined for leprosy and 14 were found positive. This included 3 Ceylonese.

The number of births was 36. The infantile mortality was 83 per thousand.

There were 7 deaths among the permanent residents of the camp.

The births and deaths include those residing outside the camp.

### (b) Tattaparai Camp.

The number of passengers who embarked for Ceylon via Tuticorin was 9,279. The ban on Immigration is still in force. 26 passengers were rejected on account of illness.

8,279 passengers were vaccinated against smallpox, 7,575 at Tuticorin and 685 at Tattaparai Camp.

The resident population at the end of the year was 210.

Ten cases were treated at the hospital and 952 cases at the dispensary.

There were 2 cases of chickenpox and 12 cases of dysentery at the Camp.

### 3. Port Health Services and Aeroplane traffic :—

#### (a) Colombo.

Of vessels calling at Colombo, 139 vessels were infected. The diseases were 1 case of smallpox, 1 case of chickenpox, 58 measles, 74 mumps, 1 whooping cough, 1 meningitis. These occurred among the passengers and the crew and suitable precautions were taken to prevent the spread of the diseases. Four cases were dispatched to the Infectious Diseases Hospital, Angoda, and the other 135 cases were isolated on board the vessels themselves.

### Preventive Inoculation.

(1) *Anti-Smallpox.*—Vaccination against smallpox was carried out as follows :—

At the Port Health Office (including the mass vaccinations)	..	21,723
At the office of the Assistant Port Health Officer for Immigration	..	4,109
At the Disinfecting Station	..	2,763
Total	..	28,595

Apart from these, 258 outgoing passengers were vaccinated at their request.

(2) *Anti-cholera.*—Five persons were inoculated at the Port Health Office free. Two outgoing passengers were inoculated at their request.

(3) *Anti-typhoid.*—One passenger was inoculated at the Port Health Office free. 5 outgoing passengers were inoculated at their request.



**Passenger Traffic with India.**

*Departures.*—All passengers leaving Colombo for Tuticorin by steamer except first class passengers were medically examined prior to embarkation.

Of the 7,063 passengers so examined, 28 were found unfit for the voyage and detained for the following reasons:—Chickenpox 4, syphilis 1, temperature 23.

989 Bills of Health were issued.

10 rat certificates were issued.

*Rat Trapping.*—Regular rat trapping was carried out in the Port Commission area (excluding the Harbour Engineer's Yard) and in the Chalmers' Granaries and Manning Markets by the staff of the Colombo Municipality who set 83 traps on an average daily throughout the area. The number of rats trapped was 824 in the customs area and 515 in the Chalmers' Granaries and Manning Markets. No rats were found to be plague infected.

Twenty vessels were fumigated—6 with sulphur, 10 with liquid HCN and 4 with Zyklon B. Deratization Exemption Certificates were issued to 43 ships.

All occupied stores at the Chalmers' Granaries and Manning Markets were fumigated with liquid HCN free of charge once in six months.

**Fumigation of Merchandise from Plague infected Ports.**

Fumigation of plague suspect cargo was started in September, 1936. Since then the incidence of plague in the Island has decreased gradually until August, 1938, from when there has been no plague at all. This measure has therefore achieved its purpose in preventing the introduction of plague infection to Ceylon.

The following is a list of the number of bags or bales of plague suspect cargo fumigated.

Rice	..	..	..	4,580,211
Paddy	..	..	..	1,000
Cotton	..	..	..	300
Contact cargo	..	..	..	112,663
Total				4,694,174

*Fumigation of Lighters.*—All lighters used for the transport of cargo in the harbour are fumigated once a month, the pot method of fumigation being employed. There were 444 dead rats collected from these lighters, but none of them was found to be plague infected.

*Water Supply to Ships.*—The water boats are thoroughly cleaned out once a quarter and their interiors are cement washed. Thereafter each boat is inspected by a Port Health Officer before passed as fit for use. Samples of water are also sent for bacteriological examination. Samples of blood from all the water boatmen (81 in number) were sent for bacteriological examination for ascertaining the typhoid carrier condition and was found negative.

*Sanitation of the Port Commission Area.*—The 3 Assistant Port Health Officers make inspections and submit monthly reports on three separate sections of the Port Commission area. The area has been maintained in a very satisfactory condition.

*Inspection of Damaged Foodstuffs.*—Nineteen consignments were inspected and reported on by the Port Health Officers, in the Customs Warehouses, Chalmers' Granaries and Indian Goods' Shed out of which 18 consignments were recommended for destruction.

**Quarantine and Disinfecting Station.**

*Quarantine of Crews.*—Indian seamen numbering 1,988 were housed here until the arrival of their vessels in the harbour.

*Disinfection of Soiled Linen.*—1,304 cradles of soiled linen from ships were disinfected with steam. 9 cradles of soiled linen belonging to the Naval Department and 2 belonging to the Police Department were also disinfected free.

*Colombo Air Port, Ratmalana.*—The quarantine duties in this connection are done by the Port Health Officer and his three assistants in rotation.

**(b) Galle.**

Three vessels were granted pratique outside the harbour. Others were granted free pratique.

Nine Bills of Health were issued in the year.

179 cradles and pillows and mattresses from the Civil Hospital, Galle, were disinfected free of charge. One cradle of mattresses was disinfected for which a charge of Rs. 2 was recovered and credited to revenue.

**IV.—GENERAL.**

58,079 permits were issued during the year by the Quarantine Office, Colombo, to intending passengers to India authorizing them to cross over to Ceylon on their return journey without detention in either of the quarantine camps at Mandapam or Tattaparai provided the passengers were healthy and were not contacts of a quarantinable disease and subject to surveillance on arrival in Ceylon and also to disinfection and vaccination if required.



## SECTION IV.—CEYLON MEDICAL COLLEGE.

At the commencement of the year there were 229 students on the roll.

Fifty-three students were admitted to the College.

In addition to the University College, which provides the pre-medical course and the six other Colleges already recognised for pre-medical work, two more Colleges were recognised during the year, namely: Royal College and St. Thomas' College.

Twenty-six students qualified for the Licence in Medicine and Surgery and eighteen of these passed in the First Class.

Research work was carried on as usual and several original contributions were made to scientific literature by members of the College Staff.

Colombo, May 26, 1942.

S. P. CHELLAPPAN,  
Director of Medical and Sanitary Services.

